



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.           | CONFIRMATION NO.       |
|--|-------------|----------------------|-------------------------------|------------------------|
| 10/659,400   | 09/11/2003  | Song-Rae Cho         | P-0530                        | 3763                   |
| 34610  | 7590        | 04/24/2007           |                               |                        |
| KED & ASSOCIATES, LLP<br>P.O. Box 221200<br>Chantilly, VA 20153-1200 |             |                      | EXAMINER<br>MEHRPOUR, NAGHMEH |                        |
|  |             |                      | ART UNIT<br>2617              | PAPER NUMBER           |
|  |             |                      | MAIL DATE<br>04/24/2007       | DELIVERY MODE<br>PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/659,400

Applicant(s)

CHO, SONG-RAE

Examiner

Naghmeh Mehrpour

Art Unit

2617

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 22 January 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1,3-5,7-22,24 and 25.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: please see the attachment.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_  
13. ☐ Other: \_\_\_\_\_.

  
NAGHMEH MEHRPOUR  
PRIMARY EXAMINER

***Response to Arguments***

1. Applicant's arguments filed 1/22/07 have been fully considered but they are not persuasive.

The references made herein are done so for the convenience of the applicant. They are in no way meant to limit the reference. The reference **MUST** be considered in its entirety.

In response to the applicant's argument that Qu fails to meet each of the claims limitation.

The Examiner asserts that Qu teaches techniques are provided herein to filter broadcast SMS messages at a mobile station based on network configuration, user configuration, user preferences, and so on. These techniques enable the service provider to configure the mobile station's broadcast SMS capabilities and further allow the mobile user to configure and change the broadcast SMS capabilities based on user preferences. The settings for the network configuration, user configuration, and user preferences are stored in a non-volatile memory that is within the mobile station or accessible to the mobile station (e.g., a removable user identity module (R-UIM)).

one embodiment, a method is provided for filtering broadcast messages at a receiver (e.g., a mobile station) in a wireless communication network (e.g., a CDMA network that implements ANSI-41). In accordance with the method, a

broadcast message is initially received, and one or more filtering criteria are applied to the received broadcast message. The filtering criteria are defined by settings stored in a removable module (e.g., the R-UIM) coupled to the receiver. The received broadcast message is then processed if it is not filtered out by the one or more filtering criteria. The one or more filtering criteria may include (1) those imposed by a service provider and defined by a network configuration setting, (2) those determined by the mobile user and defined by a user configuration setting, (3) those selected by the mobile user based on user preferences, or (4) any combination thereof. The network configuration setting may indicate that all broadcast messages are allowed to be received ("Allow All"), no broadcast messages are allowed to be received ("Disallow"), or only broadcast messages for entries programmed in a service table are allowed to be received ("Allow Table Only"). The user configuration setting may indicate that all allowed broadcast messages are to be received ("Activate All"), no broadcast messages are to be received ("Deactivate"), or only broadcast messages for entries programmed in a service table are to be received ("Activate Table Only").

The user-selected filtering criteria allow for filtering of broadcast messages based on service category, language, priority, or any combination thereof. These criteria apply to entries programmed in the service table, with each entry corresponding to a unique combination of service category and language. Each programmed entry may be selected or unselected, and only broadcast messages for selected entries may be processed (assuming that other criteria are met) if the service table is enabled for use.

The network and user configuration settings and the service table may be stored in one or more elementary files in the removable module. Techniques are also provided herein for over-the-air programming of the network configuration setting and the service table for the mobile station via programming messages. FIG. 3 is a diagram of an embodiment of a service table 300 that may be maintained by a mobile station for filtering broadcast SMS messages. In this specific embodiment, the service table includes four columns used for broadcast message filtering: Service Category, Language, Priority, and Selected. The Service Category column includes the identities of various service categories that have been programmed into the service table. The Language column includes the language associated with each programmed service category. In an embodiment, the service table includes one entry (or row) for each unique combination of service category and language. The lists of all service categories and languages currently defined by TIA/EIA-637-B are given in TSB-58-E, entitled "Administration of Parameter Value Assignments for cdma2000 Spread Spectrum Standards," which is publicly available and incorporated herein by reference. In an alternative embodiment, the service table may be defined to include one entry for each unique combination of values in some other set of specified columns (e.g., one entry for each unique combination of service category/priority, or service category/language/priority, or some other set of columns). The Priority column includes the priority selected by the mobile user for each service category/language combination (i.e., each programmed entry) in

the service table. The Selected column includes an indication of whether or not each service category/language combination in the service table has been selected for reception by the mobile user. Only broadcast messages for programmed entries that have been selected are processed by the mobile station (assuming that other criteria, if any, are also satisfied). The service table may be defined to include other columns for other information useful for broadcast messages. In the embodiment shown in FIG. 3, the service table further includes (1) an Alert Option column to indicate the particular alert option to use for the broadcast messages for each programmed entry, and (2) a Max Message column to indicate the maximum number of broadcast messages that may be stored for each programmed entry. The list of all currently defined alert options is given in the TIA/EIA-637-B standard document. The service table may also be defined to include other columns for other information that may be pertinent for the processing of broadcast messages.

The filtering of broadcast SMS messages at the mobile station may be performed based on various criteria. In an embodiment, the broadcast message filtering criteria are classified into three categories: network configuration, user configuration, and user preferences. Network configuration includes filtering criteria imposed by a service provider. In a specific embodiment, a number of possible settings are defined for network configuration and are shown in Table 1. The incoming broadcast messages would then be filtered at the mobile station based on the programmed network configuration setting.

| TABLE 1 | Field Name | Description  |
|---------|------------|--|
| 1       | Disallow   | This setting disables the mobile station's broadcast SMS capability (i.e., the mobile station will not |

Art Unit: 2617

process broadcast SMS). Allow Table Only This setting allows the mobile station to receive only broadcast messages for the service categories that have been programmed in the service table. Allow All This setting allows the mobile station to receive broadcast messages for all service categories **(Parameter to be changed, changing the stored parameter at the mobile telecommunication terminal when the password contained in the SMS message is identical to a password to a password stored in the mobile telecommunication terminal.**

User configuration includes filtering criteria determined by the mobile user. A number of possible settings are defined for user configuration and are shown in Table 2. The incoming broadcast messages would further be filtered at the mobile station based on the selected user configuration setting. TABLE 2 Field Name Description **Deactivate** (changing the performance) .This setting deactivates the mobile station's broadcast SMS functions (i.e., the mobile station will not process broadcast SMS). Activate This setting allows the mobile station to receive only **(changing the performance)** Table broadcast messages for the service categories that have only been programmed in the service table, subject to any additional filtering criteria included in the service table based on user preferences. This setting is only valid if the network configuration is not Disallow. Moreover, the mobile user can selectively enable and disable individual programmed entries in the service table. Activate This setting allows the mobile station to receive broadcast All messages for all service categories. This setting is only valid if the network configuration is "Allow All". The service table will not be consulted for this setting. In an embodiment and as indicated in Table 2, the user

configuration is restricted (or constrained) by the network configuration. Thus, the user cannot validly obtain a user configuration setting that is broader than the network configuration setting. For example, if the network configuration setting is "Allow Table Only", then the user configuration setting is restricted to "Activate Table Only" or "Deactivate". User preferences include filtering criteria selected by the mobile user and are applied to the programmed entries in the service table. The mobile user may be allowed to individually enable/disable (or select/unselect) each programmed entry in the service table. The mobile user may also specify the priority level for each programmed entry. In this case, of all incoming broadcast messages for a particular selected (enabled) programmed entry, only those having priority equal to or greater than the priority level specified in the service table are processed. The user preferences in the service table only take affect if the service table is enabled for use. This would be the case if the network configuration setting is either "Allow All" or "Allow Table Only" and the user configuration setting is "Activate Table Only". The network configuration setting thus defines the filtering criteria imposed by the service provider, the user configuration setting defines the filtering criteria determined by the mobile user, and the service table includes the filtering criteria selected by the user. Fewer, different, and/or additional filtering criteria and categories may also be used, and this is within the scope of the invention. In general, the settings for the network configuration, user configuration, and user preferences (and any other information that may be useful for filtering broadcast SMS messages) may be stored in a non-volatile memory that is either within the mobile station or accessible to the mobile station. The



Art Unit: 2617

non-volatile memory may be a Flash, an electrically erasable programmable read only memory (EEPROM), a multimedia card (MMC), or some other non-volatile memory type.

A handwritten signature in black ink, consisting of several overlapping loops and a long horizontal stroke at the bottom.

NAGHMEH MEHRPOUR  
PRIMARY EXAMINER